

St. Bartholomew's Hospital



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DECEMBER, 1903.

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NOTICE.

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St. Bartholomew's Hospital Journal,

DECEMBER, 1903.

*"Æquam memento rebus in arduis
Servare mentem."—Horace, Book ii, Ode iii.*

Notes.

THE meeting of the Governors called to consider the Report of the Mansion House Committee was held on November 5th, and it is with the greatest satisfaction that we announce that the portion of the "out-patient" block figured in our issue of October is now fully approved. What is of even greater importance is the decision to proceed at once with the detailed plans for this block, so that its actual erection shall be commenced almost immediately. It was also decided at the same meeting to proceed simultaneously with the five new operating theatres on the north wing over the Great Hall,

but no decision was come to with regard to any other of the projected new buildings.

Our affairs have attracted again the attention of various irresponsible critics in the daily papers, but what is of much more importance to the public at large is the fact that it has been decided to issue an appeal for about £350,000 early in the coming year, and that the Lord Mayor has convened a public meeting at the Mansion House for January 26th next.

When this time comes it will be the privilege and duty of every Bart.'s man to assist in every way that he can, and especially by bringing before his more wealthy patients the strength of our claims upon the public. It should be remembered that our present wards were built 160 years ago, and that since that time we have made no public appeal for funds. We have been able to carry on our work without exceeding our income, but with our constantly growing expenses it has not been possible to put by money for capital expenditure also. Is it too much to expect that the public will supply us with new buildings once in 160 years? We do not believe it; and indeed we look forward to the success of our appeal with every confidence in the justice of our claims.

We will only allude to one further matter. It has been pointed out that our site is all too small for the many buildings it has to accommodate, and it is said that we should aim at getting more land. Well, we have aimed at it, and a letter signed by a "St. Bartholomew's man" in the *Lancet* and *British Medical Journal* for November 20th points out that four years ago and on subsequent occasions the medical staff brought this matter before the notice of our Governors. Neither they nor the Mansion House Committee have seen their way to recommend the purchase of more land because of its great cost, and they did not consider that the public would approve of so large an expenditure. But, as we have pointed out above, the buildings to be now erected are confined to one new block; and if any of our readers can find patients who will buy us even one acre of land more, then our building site

will be immensely more valuable, and the buildings that are to be erected in the future will be planned on a much more satisfactory scale than they could be planned at present. Let it be clearly understood that at present we are committed to no building scheme that cannot be entirely recast in accordance with the success of our appeal, and for that success let every one work.

* * *

MR. D'ARCY POWER has been appointed Consulting Surgeon to the Sevenoaks Hip Hospital, in place of the late Mr. W. J. Walsham.

* * *

MR. D'ARCY POWER has been unanimously elected to the office of Consulting Surgeon to the Bromley Cottage Hospital in succession to the late Mr. W. J. Walsham.

* * *

ARTHUR GEORGE HAYDON, M.D., M.R.C.S., has been elected President of the Brussels Medical Graduates' Association.

* * *

SYDNEY W. CURL has been admitted a member of the Royal College of Physicians of London.

* * *

DR. EUSTACE TALBOT has been appointed Assistant Physician to the Royal Hospital for Diseases of the Chest, City Road.

* * *

WE hear that Dr. Hensley has gone to Mentone for the winter, and that he intends to practise as a consulting physician there. We wish him all success. All who have had the privilege of working with him either here or at the Royal Chest Hospital know how valuable his opinion is, especially on matters concerned with the physical signs of the chest. His ripe experience should prove of the greatest benefit to the practitioners of the Riviera.

* * *

SINCE the last number of the JOURNAL we have to record three changes on our staff, namely, the appointment of Mr. Lockwood as Surgeon, the appointment of Dr. Calvert as Assistant Physician, and that of Mr. Bailey as Assistant Surgeon. We offer these three gentlemen our sincerest congratulations on the rewards which their long service to the Hospital School has gained.

* * *

As the result of an increased demand for the November JOURNAL, some of the members of the hospital were unable to obtain copies, with which were distributed portraits of the late Mr. Walsham. We regret that we cannot reprint the JOURNAL; we have, however, reprinted Mr. Walsham's portrait, and those members who were unable to obtain it

may do so on applying to the Librarian, St. Bartholomew's Hospital Library. We have taken steps to prevent an incident of this kind in the future by increasing the number of copies of the JOURNAL.

* * *

WE should be glad to receive from subscribers any suggestions which they may care to make as regards the contents and management of the JOURNAL for the year 1904. Such suggestions will not be published, but will be brought up and discussed at meetings of the Publication Committee. We hope that a few subscribers, especially those holding positions as secretaries or upon committees, will give us the benefit of their opinions.

* * *

WE are pleased to notice that both the Hockey and Rugby Football Clubs are in hopes of raising a third team. No doubt this increase in numbers will cause greater competition for the first team, and we would suggest that besides the practical test in the field, the committees should examine likely candidates by means of a "theory paper," somewhat on the lines of the example appended below:

THEORY OF FOOTBALL.

NOTICE.—Candidates must play for one side only. No marks will be given for work done after the whistle has sounded. Only one question to be attempted at a time.

1. Distinguish between a full back and a fool forward; are these terms interchangeable under any circumstances?
2. What is meant by "4:3" are 4's equivalent to 3? If not, why not?
3. Can you define the duties of a referee? What course should you pursue if the referee in your opinion acted unfairly? How much damages should you be prepared to pay?
4. How many captains are there in one football team? If a captain is the only one who should give advice on the football field, how do you account for the voices heard during the game? Should you say that the captain was a ventriloquist?
5. Translate into English—"The scrum heeled well, and Jones picking up cleanly passed to Robinson, who dodged the opposing three-quarters and succeeded in touching down between the uprights—Jackson converted—The whistle then blew no side, and the referee walked off with the touch judges!"
6. Could you convert a heathen in the same way that you convert a try?

While on the subject of football examinations we would also advise committees to inspect the boots of the players: some of the footballers are, we hear, following after strange boots. Some athletes may seek for support in patent medicines, but a good understanding in the shape of boots provided with bars is indispensable for keeping one up during a football match. The remedy here is easy to find. All flat-soled boots should be barred—and there you are.

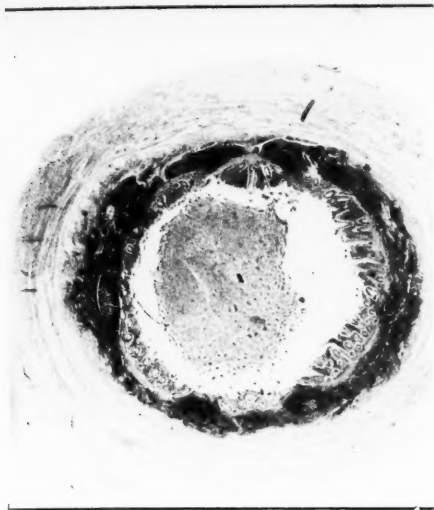


FIG. 1.—Section of an appendix with a "calculus" *in situ*. ($\times 50$.)



FIG. 2.—The same "calculus," showing colon bacilli. ($\frac{1}{12}$ immer.)

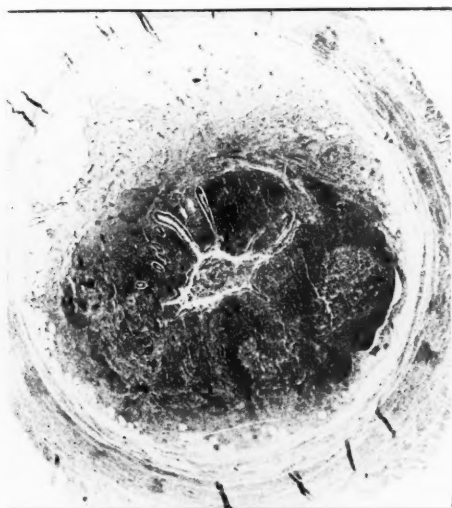


FIG. 3.—Section of inflamed appendix, with pus in lumen. ($\times 50$.)

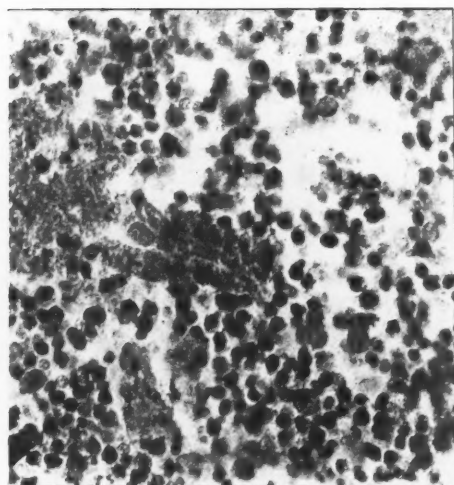


FIG. 4.—Colonies of staphylococci from same pus. ($\frac{1}{12}$ immer.)



FIG. 6.—Pin in lumen of appendix. (R. Coll. Surg. Museum.)

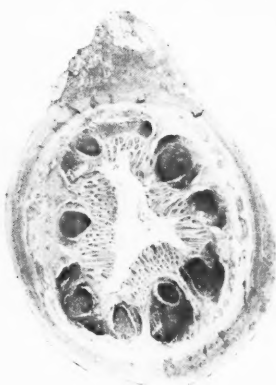


FIG. 5.—Section of foetal appendix showing lymphoid follicles.



FIG. 7.—Solder in lumen of appendix. (R. Coll. Surg. Museum.)



FIG. 8.—Appendix alone in a right inguinal hernial sac. (R. Coll. Surg. Museum.)



FIG. 7.—Appendix containing calculi. (St. Bart.'s Hosp. Museum.)

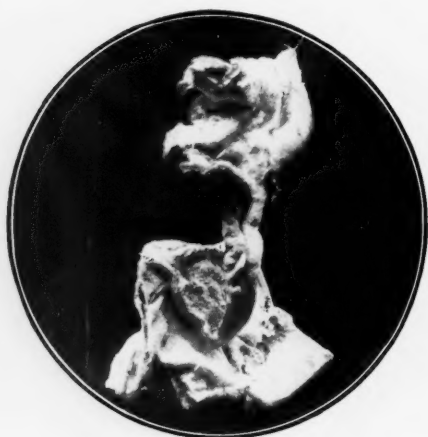


FIG. 9.—Appendix in right femoral hernial sac, internal view. (St. Bart.'s Hosp. Museum.)

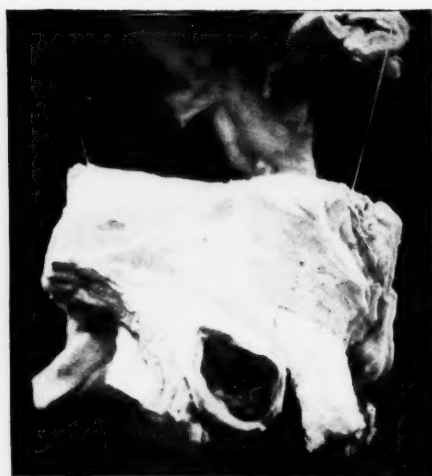


FIG. 10.—Appendix in right femoral hernial sac, external view. (St. Bart.'s Hosp. Museum.)

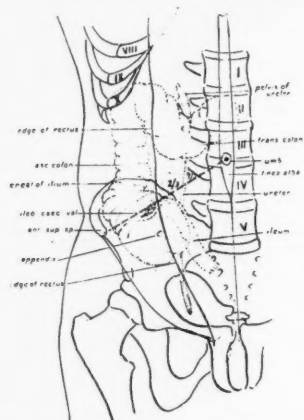


FIG. 11.—Diagram to show ileo-caecal valve under "McBurney's spot." (Keith, in Treves' "Cavendish Lecture," 1902.)

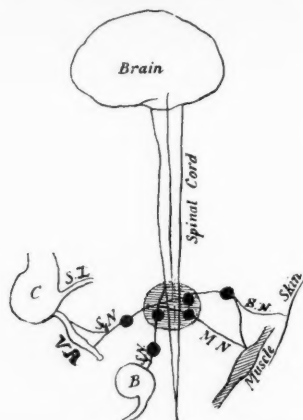



FIG. 12.—Diagram to show reflex nerve connections of appendix. (Modified from diagram of James Mackenzie.)

The Incidence of Inflammation of the Vermiform Appendix.*

By W. MCADAM ECCLES, M.S.Lond., F.R.C.S.Eng.,
Assistant Surgeon to St. Bartholomew's Hospital, etc.

ENTLEMEN,—I purpose this evening to lay before you a few points that have interested me in the subject of the incidence of inflammation of the vermiform appendix. I say points which have interested me personally, for, as some of you know, I have myself been a sufferer from this lesion, and have to thank one of my colleagues, Mr. Bowlby, for his kindness in operating upon me, and therefore for my presence here to-night.

We are constantly asked at the present by the laity why it is that appendicitis is so common nowadays. And even those practitioners who aver that they saw but little or nothing of the lesion in the earlier periods of their practice are now asking the same question.

It is partly our business to-night to see whether there is any satisfactory answer. The vermiform appendix has always been present in the body,—in fact, authenticated records of its absence, except as the result of disease or operation, are almost unknown. There are certainly a few, though confused references to lesions of this little tube in several of the writings of past medical authorities, but it must be confessed that the amount of literature on the subject at the present day is almost bewildering. It would seem that every surgeon nearly must have some say on the subject, and all, from the highest to the lowest personage in the land, must run the risk of being placed in grave danger by it. This being so, it is only natural that attention should be, and has been, very markedly turned to the solution of the reason or reasons why the disease is now so prevalent.

The great frequency with which it is seen may, I think, be due to at least three causes.

The first that the lesion is really more common now than it was formerly.

The second that the disease, although perhaps not actually more frequent, is much more generally and accurately diagnosed.

The third that surgical treatment has revealed with greater preciseness the presence of the disease and the cause of the symptoms with which it is associated.

There can be no doubt that there are certain diseases, and particularly those which are dependent upon the invasion of bacteria, which have, as it were, their times of ascendancy and of decline, partly owing to the prevalence or the scarcity of the organisms themselves, and partly

owing to the want of suitable soil in which, when present, they may grow.

It is thus with influenza, and it has been stated that since the gastric and intestinal form of influenza has been prevalent, the number of cases of appendicitis has correspondingly increased. There may be some truth in this statement, for the action of the influenza micro-organism is such as to set up an intense hyperæmia of all mucous membranes, and particularly that of the lungs and that of the alimentary tract, where adenoid tissue is abundant. This inflammation may pave the way for the virulent action of the colon bacillus, and thus may indirectly bring about an attack of appendicitis.

Whatever may be the part played by many predisposing causes, the actual lesion in the walls of the appendix is, I hold, always bacterial in origin (Figs. 1, 2, 3, and 4).

Bacteria are not found in the meconium. The colon bacillus may be demonstrated not many days after birth. It is unlikely, therefore, that any lesion of the appendix could be truly congenital, except in those rare cases where maternal bacteria invade the fœtus. Quite young infants, however, may have attacks.

Sections of the appendix at the earliest stages reveal that the organ is almost a pure gland, so large in proportion and thickly set are the masses of adenoid tissue. Here is its resemblance to the tonsils, and thus its appellation of the abdominal tonsil (Fig. 5). Most, if not all attacks of "tonsillitis" are of bacterial origin, and by inference the same may be true of inflammation of collections of adenoid tissue elsewhere. "Rheumatic" tonsillitis is still a term which is not uncommonly used, and "rheumatic" appendicitis has made its appearance and has perhaps come to stay.

But putting aside all the cases which possibly owe their origin to uncertain causes, there remains the large majority in which definite bacterial invasion has taken place.

A point of considerable practical importance here arises. Can these bacteria damage a healthy appendix, or is it necessary that there should have been some previous factor operating so as to open the door for the passage of the organisms?

Much has been written as to the entrance of foreign bodies into the appendix from the cæcum, and of their damaging the mucous membrane so as to allow the bacteria present to migrate.

Now, while the number of cases in which macroscopic foreign bodies can be demonstrated within a diseased appendix is comparatively small, it cannot be doubted that such substances play an important part, and that there may be some which are so minute as to be missed by the naked eye. But small shot may pass into the adult appendix, and pins, needles, splinters of wood, slender bones, and bristles from a tooth-brush have entered (Figs. 6 and 7). It seems almost incredible that so sharp a pointed article as a pin should travel the long distance from the mouth to the caecal

* A paper read before the Abernethian Society on October 29th, 1903.

region without sticking, and then find its way into the comparatively remote entrance of the appendix, guarded as this is by folds of mucous membrane. It has further been suggested that minute particles of enamel from cooking utensils in common use may pass along the intestine and into the appendix.

Many have thought that intestinal worms play a distinct rôle as a predisposing factor in the incidence of appendicitis. Doubtless these may find their way into the lumen of the tube. The parasite may be loaded with colon bacilli, and may deposit these after invading the privacy of the tube. If they attempt to perforate the mucous membrane, the damage they can do may be sufficient to cause inoculation of this coat with dangerous bacteria. The actual parasitic worms that have been demonstrated within the appendix are the *Oxyuris vermicularis*, the *Ascaris lumbricoides* when not fully grown, the *Trichocephalus dispar*, the *Tenia echinococcus*, and the *Tenia saginata*.

But I am convinced that there are other predisposing causes which are much more potent in their action than any foreign body or parasite can be. I would call your particular attention to three: constipation, disturbance, injury.

Of hardened fæces in the cæcum, and of stercoral ulcers in this region, I confess myself very sceptical. Given, however, a person who is more or less habitually constipated, and you have a subject who runs the risk of much decomposition of intestinal contents and of great multiplication of bacteria within the bowel lumen. Thus the appendix may become surcharged with irritating bacteria.

There is, moreover, another circumstance, which I look upon with even greater suspicion. I refer to what I may call "constipation due to deferred payments." While constipation of the ordinary character is decidedly more common in females than in males, yet appendicitis is said to be, and I think is, of greater frequency in the male sex. But what happens in men to a considerable extent is that now and again, possibly often, the time for the usual daily evacuation of the bowels is allowed for some reason or other to go by. There is the hurry to catch the morning train, there is the lack of opportunity in the middle of the day, and when evening comes all inclination to defæcate has gone by, and a deferred payment has taken place. It is not infrequent that men, and perhaps women also, who, either from neglect or from want of a suitable chance, fail to rid the intestines of effete matter, suffer from a certain degree of uncomfortableness in the region of the cæcum by its becoming overloaded. It is thus that they may be disturbed at night with pain in the right iliac fossa, magnified no doubt by the sensations of the half-wakened state, but nevertheless distinct. In my experience many persons afflicted with appendicitis will volunteer such a history as this previous to the onset of the attack. I have also been consulted by those who have had recurrences of so-called

appendicular colic, who have got rid of their trouble by careful attention to a regular evacuation of the large intestine.

Again, there is what I would call a disturbance of the rest of the appendix. How often it is—as I think was first pointed out by Treves—that inflammation of the appendix is precipitated by a long walk, a hard round of golf, energetic batting or bowling, a close fast tennis match, or a strenuous spell of sculling or cycle-riding!

The appendix together with the cæcum lies not infrequently upon the most contractile part of the right psoas, and is liable, therefore, to a considerable disturbance when that muscle is strongly put into action.

It is possible that this disturbance of the tube may lead to some interference with its arterial supply. The appendicular artery, from the ileo-cæcal branch of the ileo-colic vessel, is a terminal one, and obstruction to the blood-flow through it is highly detrimental to the vitality of the organ. Moreover pressure upon or kinking of the vein is exceedingly easily brought about with its consequent congestion and lowered resistance of the appendicular tissue.

Thirdly, there is actual injury to the appendix. I have known this to occur from an external blow, from the passage of a cart wheel, and from violent or ill-applied massage.

The appendix, like the duodenum, would seem to be prone to injury from such causes, but probably from a different reason: the appendix is cord-like and somewhat brittle; the duodenum is fixed, and lies across the spine.

Further, an appendix in a hernial sac is liable to injury from a truss (Figs. 8, 9, and 10). Inflammations render the appendix peculiarly friable in their acute stage, and not infrequently distinctly brittle in their chronic forms.

Other very important matters in association with the incidence of appendicitis, and probably favouring its bacterial origin, are errors in diet and in the manner of taking food.

Any food material which tends to induce undue fermentation, and the consequent evolution of intestinal gas, seems to be the precursor of inflammation of the appendix. Meat in the least tainted, high game, frozen mutton, raw fruit, and a host of other dietetic products have been attributed with baneful proclivities.

But what is to my thinking of greater consequence is the manner in which the food is taken. Bolting of food without proper mastication is very suggestive. I have been much struck with the large number of schoolboys of all ranks of life who fall victims to appendicitis. May this not be due to the fact that meals are rushed with the day-school boy, and the "tuck-shop" very often frequented by both the day-boy and the boarder? Then look at another class, the busy City man. Breakfast, often of rather indigestible material, put away rapidly and recklessly, followed by a run to the station; lunch, perhaps somewhat heavy, and often eaten much too quickly, perhaps more than

one intermediate libation, and home to a full-course dinner. This, together with the deferred payments already alluded to, sets up gastro-enteritis, the flooding of the intestines with bacteria-laden fluid, and is followed in all too many cases by appendix inflammation.

The same may be said of the overworked medical student (and he does exist!), and the nightly tired general practitioner. The number of cases of appendix trouble in medical men and students is rapidly increasing in practice, and if we do not take better care of our "insides" it will, I fear, become even larger.

In female subjects it is a matter of general observation that the incidence of appendicitis is often associated with a menstrual period. Whether this is due to some correlation between the ovary of the right side and the appendix, in connection with blood-supply, is uncertain. Occasionally there is present an appendicular ovarian ligament, along which blood-vessels run between the two organs.

Before leaving the causes of appendix inflammation the presence of new growths, primary or secondary, must not be forgotten, nor must the invasion by tubercle bacilli and by actinomyces be overlooked.

I desire now to pass to the consideration of the symptoms and signs induced by the oncoming of appendicitis.

Perhaps in no other disease may they be so diverse, in one case being altogether misleading, and in another absolutely typical. I would therefore crave your forgiveness for those who make mistakes in their diagnosis, or delay in coming to an opinion that an inflammation of this tube is present, unless such delay and error is the outcome of crass ignorance.

In order to understand aright the question of these signs and symptoms of appendicitis it is essential to bear in mind at least three facts. The first is that the extent and intensity of the inflammation varies very greatly in different cases, and does not bear an exact relationship to signs and symptoms. The second, that a sense of localisation is absent from the viscera. This should be a well-known fact, but is often forgotten, and Dr. James Mackenzie has done well to draw particular attention to it once again.* The third is that the appendix varies very greatly at times in its exact site within the abdomen.

With regard to the first point, it is now well recognised that sometimes the most acute inflammations of the appendix, those leading perhaps to rapid gangrene of its tissues, may be accompanied by the fewest localising signs in their early stages, and the patient may die before an accurate diagnosis has been made. I know of hardly any lesion more tragic in its consequences than some of these cases of fulminating appendicitis, so unlooked for and rapid are they in their incidence and progress.

I make no apology for bringing before you some of the

suggestive remarks of Dr. James Mackenzie in connection with the second point; they bear reflection.

He is emphatic that "if a due appreciation of the manner in which sensory and other phenomena arise in visceral disease be obtained, then a whole series of symptoms can be explained in a satisfactory manner, and much help is afforded in unravelling the symptoms of the disease from those of other diseases which simulate it"; and I would cordially endorse his statement.

It is probable that in appendicitis the chief signs and symptoms depend to a great extent upon the implication of the surrounding and adjacent peritoneum. The organ itself when healthy, like other hollow viscera, has little or no inherent sensitiveness. Visceral peritoneum when uninfamed is alike insensitive. Not so parietal peritoneum, which is usually acutely sensitive even when healthy, probably owing to the presence of the terminal filaments of intercostal nerves in the subserosa.

Acute appendicitis is usually ushered in by sudden pain, with nausea and vomiting, succeeded by muscular spasm and rigidity.

Many patients are all at once seized with a diffused pain in the abdomen, felt to a greater or less extent over the distribution of the sensory filaments of the eleventh and twelfth dorsal and first and second lumbar nerves. Roughly this area may be described as reaching from a line drawn horizontally a little below the umbilicus down to another carried obliquely from just inferior to the great trochanter to the inner border of the thigh about one third of the way down.

The law regulating the area over which pain is felt in visceral lesions is dependent on the fact that when an efferent nerve is stimulated in any part of its course from the periphery to the centre, the localisation of the resultant pain is always made in the exact peripheral distribution of the sensory nerve. Now in the earliest stages of appendix inflammation there is but little involvement of spinal nerve endings, and pain may be absent; but as soon as the peritoneum becomes involved, pain, though not as yet definitely localised, is experienced. Soon, however, not only is pain present, but it becomes limited to a comparatively small area as localisation becomes more accurate, and actual hyperæsthesia puts in an appearance. Some particular spots may be more exquisitely hypersensitive than others. Such is "McBurney's spot," the place where a twig of the eleventh dorsal nerve pierces the rectus abdominis muscle (Fig. 11).

The spreading of the stimulation of the afferent nerves conveyed to and up the spinal cord will induce nausea or even actual vomiting.

Muscular spasm and rigidity are but seldom absent. The extent of the muscular contraction varies much. As a general rule it is limited to the muscles forming the anterior wall of the right iliac fossa, producing a very

* *British Medical Journal*, July 11th, 1903, p. 66.

characteristic phenomenon of the disease (Fig. 12). Irritation of the afferent fibres of the mixed dorsal nerve causes a transference of energy through centres in the cord down the efferent nerve to the muscle supplied by it, and hence the contraction of its fibres. I entirely agree with those who assert that, in many instances in which the diseased appendix is said to be palpated through the abdominal wall, what is really felt is a band of contracted muscular fibres in the anterior abdominal wall.

Again, it is possible for other adjacent viscera to be stimulated as well as muscles of the parietes. Thus the bladder may show signs of irritation, and I have seen not a few instances of dysuria in appendix inflammation, and this particularly in young females, due perhaps to a reflex contraction of the sphincter vesicæ.

The incidence of acute appendicitis may be followed by the persistence of what may be called chronic inflammation of the appendix, namely, pain of the character of a dull ache, pain on straining, such as needed for closing a heavy window, and in many cases a general "out of sorts" condition frequently associated with anæmia.

Lastly, there is the great variation in signs and symptoms owing to the great variety of places in which the appendix may be found. The organ within my own experience was placed on the left side, was fixed near the under surface of the liver, was entirely intra-pelvic, was prolapsed in both inguinal and femoral hernial sacs. With such a diversity of position it is easy to see that the incidence of inflammation associated with it may be a matter of the greatest difficulty to recognise.

But the importance of as far as possible determining the existence of a diseased appendix is so great from the point of view of prognosis that I offer no apology for having brought some facts connected with the incidence of appendicitis before you to-night.

Lecture Introductory to a Course on Chemical Pathology.

By A. E. GARROD, M.D.

(Concluded from p. 22.)



THIRD example is afforded by the fate of benzoic acid when administered by the mouth. This acid undergoes a synthesis, of which the kidneys are probably the seat, and appears in the urine in the form of hippuric acid. The glycol with which it is combined can hardly be anything else than an intermediate product which it encounters in its passage through the body.

Consider how scanty are the means at our command of tracing the chemical changes which are brought about in

the body laboratory. We can acquaint ourselves with the constitution of the raw materials which are supplied; we know much about the finished products of which the tissues are built up, and the study of the excreta throws much light upon the end products of tissue metabolism. Of the stages that intervene we know comparatively little, and much of what we do know has been learned from the study of these "brands snatched from the burning," the intermediate products of metabolism, which, under certain conditions, enter into combination, and are so preserved to appear in the excreta.

The chief channels for the disposal of the waste end products are the lungs, kidneys, and skin. The expired air contains the great bulk of the carbon waste, and not a little of the final product of the oxidation of hydrogen, namely, water.

The bulk of the nitrogenous waste is carried off in the urine, and the loss of nitrogen in the sweat, shed hair, and epithelium is so small that it may practically be neglected.

Some carbon is excreted in the urine in the forms of urea, uric acid, kreatinin, and other substances present in scantier amounts; and it is worthy of note that whereas the waste products in the expired air, carbon dioxide and water, are fully oxidised substances, the potential energy of which has been exhausted, the end products of nitrogenous metabolism are not fully burnt, and still have some residue of unutilised potential energy.

The importance of the study of the urine as a branch of chemical pathology can hardly be over-estimated. The labour expended upon it has been immense, and no better evidence of the mass of knowledge acquired can possibly be afforded than by a glance through the monumental work of Neubauer and Vogel, now edited by Professor Huppert, the several editions of which accurately reflect the progress of urinary chemistry.

The urine is a mixture of most extraordinary complexity, in which of the almost innumerable ingredients some are present in amounts so minute that the spectroscope alone reveals their presence, whereas the excretion of urea reaches as high a figure as thirty grammes in the twenty-four hours. No doubt there are still many constituents of which we know nothing, and quite recently there was discovered a previously unknown substance, which occurs in normal urine in quantities as large as a gramme per diem.

In spite of this complexity, under strictly normal conditions none of the various constituents of human urine precipitate one another, but very slight deviations from normality suffice to bring about the throwing down of some of them, as witness the so frequent formation of uratic sediments on cooling, and the precipitation of the earthy phosphates when the natural acid reaction is for any reason lost.

The facts to be learned from the study of the urine in disease are of two quite different kinds. In the first place

abnormal products of metabolism which find their way into the blood-stream are mainly excreted by the kidneys, and hence we are able to gain information of much value as to what is going on in the tissues at large; and the knowledge obtained by qualitative analyses is supplemented by the no less important variations in the quantities of the normal ingredients.

Beyond this the examination of the urine supplies much of the best evidence, available during life, of the existence of morbid conditions of the kidneys and lower portions of the urinary tract. Whilst the kidneys are called upon to get rid of the waste products of the tissues, it is a no less important part of their functions to hold back constituents of the blood which are anything but waste products. When these organs are the seats of disease this latter function is apt to be impaired to a greater or less extent, and substances which should be retained pass onward into the urine.

The retentive power of the normal kidney is a matter of degree. It is no less essential that the blood should contain a certain amount of glucose than that glucose should not be present in it in excess, and accordingly we find that it is only when the amount of sugar in the blood exceeds a certain limit that glycosuria results.

For the normal blood proteids, serum-albumen and paraglobulin, the retentive power of the kidneys is very much higher, and under no ordinary conditions does albuminuria result from the mere presence of excess of these proteids in the blood. Yet even for proteids the retentive power of the kidneys is to all appearance selective. Whereas the passage of serum-albumen and paraglobulin through the renal barrier is an almost certain sign of renal abnormality, other proteids, such as hæmoglobin, the Bence-Jones proteid, and the albumoses appear to meet with no serious obstacle in passing through healthy kidneys. In a word, we may regard these organs as so constructed as to retain in the circulation not proteids in general, but the right proteids, the presence of which is essential.

Only less diverse than the constituents of the urine are the sources from which they are derived. It would be impossible to enumerate these, because of not a few of the component ingredients the place and mode of origin are still unknown; but a few examples will suffice to show how complicated the matter is. First come the end products of tissue metabolism, such as urea and uric acid, and the sulphates, phosphates, and chlorides of the urine. The several origins of these I will not now attempt to trace.

Other constituents are directly absorbed from the alimentary canal, into which they have been introduced in foods and drugs. Some of these appear unchanged in the urine, whereas others, such as phenol, undergo changes in their passage, and others again are, as I have already mentioned, excreted in combination with intermediate products of metabolism, and in the case of many aromatic

substances in combination with sulphuric acid, as ethereal sulphates.

This combination of aromatic substances with sulphuric acid offers a second example of a protective arrangement. Many such substances are highly poisonous, whereas the ethereal sulphates have no longer toxic properties. You will remember that another example of such chemical protection has already been referred to, namely, the neutralisation of acids with ammonia instead of the fixed alkalies of the blood and tissues, which can be ill spared.

Leucin and tyrosin, which appear in the urine in connection with certain grave hepatic diseases, are usually held to be intermediate products which, in consequence of destruction of the liver substance, escape the further changes which they ordinarily undergo in that organ, and are therefore excreted unchanged. An alternative explanation ascribed their origin to bacterial action in the tissues. Indol is formed in the alimentary canal by the action of the bacteria which there abound upon the proteids of the food; being absorbed, it undergoes oxidation and combination, and appears in the urine as indoxyl sulphate. There is every reason to believe that the pigment urobilin is similarly formed by the action of intestinal bacteria upon the bile pigment.

A further complication is introduced by the fact that a single constituent of the urine may have more than one origin. Thus a part of the oxalic acid excreted is exogenous—that is to say, is directly ingested in the food, and especially in certain vegetable foods, such as rhubarb, the eating of which is followed by a greatly increased output of calcium oxalate in the urine. A small portion is endogenous, being probably formed from gelatine, and to a less extent from kreatin, and perhaps glycol. This fraction persists when all oxalic acid has been for some considerable time excluded from the diet.

The opportunities afforded for the examination of human blood in disease by strictly chemical methods are much less frequent than used to be the case when bleeding was so frequently resorted to as a therapeutic measure. As an example of an important fact learned by this means, the detection of excess of uric acid in the blood in gout and in some other morbid states may be referred to. It must be remembered that constituents which are present in the urine in very appreciable amounts may nevertheless be present in any sample of blood in quantities so small as to baffle detection. Something may be learnt of the substances present in the blood by the examination of serous effusions, which may so often be obtained in bulk.

The examination of the sweat affords but scanty information, but that of the feces has brought to light a large number of important facts, especially as regards the secretions which are poured into the alimentary canal. I may quote the abundant presence of fat in the stools as evidence of the occlusion of the pancreatic duct, and the

presence or absence of urobilin as indicating whether occlusion of the bile-duct is complete or partial.

Lastly, mention must be made of the examination of the gastric contents after test meals, and the evidence thereby afforded as to abnormalities of the gastric secretion.

The time has now come to speak of a class of investigations which afford the most complete means available for the determination of what is happening in the body laboratory. I refer to what are known as "metabolism observations."

Such observations, which have for their object the exact determination of the intake and output of the body, are of necessity very laborious, and it is the amount of labour involved which has somewhat restricted their employment. However, very large numbers of such observations have been carried out upon persons suffering from various kinds of disease, and the results obtained have far more than repaid the labour involved in the analyses of the food, urine and faeces, day by day, over considerable periods.

For a series of quite complete "metabolism observations" it would be necessary to place the patient in a respiratory chamber through the twenty-four hours, and to study the respiratory output, as well as the composition of the solid and liquid excreta. However, without this results of great value can be arrived at by taking into account the intake as food and the output in the urine and faeces.

The value of a food is largely dependent upon the potential energy which it contains, which becomes converted into the kinetic energy of the organism. The kinetic energy of the body, which is manifested as heat, glandular activity, and muscular work, equals the potential energy of the food, *minus* the residue of potential energy in some of its excretory products. You will remember that I have already pointed out that whereas carbon dioxide and water are dead substances, the potential energy of which has been exhausted, urea and some other nitrogenous excreta are still capable of being further burnt to simple substances.

The measure of the energy of the food is the calorie. The calorie proper is the amount of heat required to raise the temperature of one gramme of water 1° Centigrade, but what is usually spoken of by that name in this connection is the large calorie, *i.e.* the heat necessary to raise 1000 grammes of water 1° C.

The calorie values of different kinds of food and of the end products of metabolism have been determined experimentally, and also the calorie requirements of the organism per kilogramme of body-weight, alike at rest and with active and slight exertion.

An adequate diet supplies the calorie needs of the body, and varies with age, activity, and with bulk. This latter is a somewhat uncertain factor, as only the living tissues require a supply of potential energy; the stored and inert fat has no such requirements.

The lessons to be learnt from observations of this kind

will be best impressed upon you by an example, which is taken from the writings of Von Noorden, one of the most prominent leaders in this kind of research.

A woman *æt.* 35 years was suffering from diabetes. The amount of exertion which she was undergoing was slight, and her calorie needs might be taken as 35 calories per kilo. She weighed 55 kilogrammes, so her total calorie need was $55 \times 35 = 1925$ calories.

For a period of five days her daily intake was as follows

Albumen 148 grammes	= 606.8 calories.
Fat 102 grammes	= 948.6 "
Carbohydrate 180 grammes	= 738.0 "
Total 2293.4 calories.	

She excreted in her urine 141 grammes of sugar per diem, which represents a daily loss of $141 \times 4.1 = 578$ calories; therefore the value of the food taken must be corrected to $2293 - 578 = 1715$ calories, and it will be seen that there was thus a daily deficit of $1925 - 1715 = 210$ calories. This must have been made up by a loss of her tissues equal to 210 calories per diem.

Now the albumen of her food contained 23.68 grammes of nitrogen, and she excreted in her urine 23.3 grammes of nitrogen, and in her faeces 1.9 grammes, making a total of 25.2 grammes. We see, then, that the daily output of nitrogen was in excess of the intake by 1.52 grammes, which corresponds to 9.3 grammes of albumen, which represents the daily destruction of her proteid tissues in excess of their reconstruction.

The burning of 9.3 grammes of albumen would only yield 38.9 calories, and $210 - 38.9 = 171$ calories remain to be accounted for; these could only be derived from the breaking-down nitrogen-free material—namely, fat, and we are justified in concluding that on her somewhat inadequate diet she was destroying an equivalent amount of her body fat, *viz.* 18.4 grammes in addition to the 9.3 grammes of proteid above referred to.

I must now pass on to speak of the law of nitrogenous equilibrium. In conditions of health upon a fixed diet the output of nitrogen in the urine from day to day equals the intake in the food, *minus* the small quantity lost in the faeces; or otherwise stated, the intake equals the output in the urine and faeces together. However, the nitrogen excreted in any given period is not that which was contained in the food taken during that period, but is a product of the catabolism of the proteid tissues. If a diet more rich in proteids is substituted, equilibrium is within a few days re-established on a higher level; and if, on the contrary, the proteid of the diet is diminished the equilibrium is soon re-established on a lower level. This holds true within comparatively wide limits. If, however, the proteid of the food is reduced below a certain limit the equilibrium is disturbed, and an expenditure of the body proteids in

excess of their reconstruction results, which raises the output of nitrogen above the intake.

In disease also the equilibrium may be disturbed. When the body is wasting, and the body proteids are breaking down, the nitrogenous output is markedly in excess; whereas during the rebuilding of the tissues, as in convalescence, some of the nitrogen of the food is utilised in reconstruction, and the output is proportionately diminished.

When the kidneys are the seats of disease, and their functional activity is consequently impaired, there may be a retention of the end products of proteid metabolism, at least for a time, and in this way also the output of nitrogen will come to fall below the intake.

By watching the body-weight of the patient we can to some extent make up for what we lose by the impracticability of conducting the whole series of observations in a respiratory chamber, and by this means also we can, in many instances, obtain a fair notion of the adequacy or inadequacy of the calorie value of the food taken.

Even the brief account which has here been given of what may be learnt from systematic examinations of the intake and output of the body will perhaps serve to give you some notion of the value and importance of this method of research.

It has been the aim of this introductory lecture to convey to you a general idea of the class of problems with which the chemical pathologist is called upon to deal, and of the means at his disposal for their solution. If I have at all succeeded in this object you will be in a better position to follow the discussion of those special subjects of which I propose to speak in my remaining lectures, such as the pathology of diabetes mellitus, upon the consideration of which we will enter at our next meeting.

A Case of Symmetrical Abscesses in the Neck.

By A. J. FAIRLIE-CLARKE.

AN ill-nourished female child eleven months old was brought to the East London Children's Hospital on October 7th, 1903, with the following history:

To within a fortnight of being seen the child had, it was said, been healthy, and was with her mother, who was hop-picking in Kent. At this time the mother thought the child had "the mumps," for she noticed swelling of the neck, first on the right side, but soon afterwards on the left side as well. At the same time the child had some sort of rash on its body. The swellings in the neck increased in size, and during the last week had grown rapidly larger.

When seen the child looked ill and wasted, and was in an ill-kept condition. In the front of her neck were two

large, symmetrical swellings, resembling in situation and outline a large bronchocele. Each anterior triangle was occupied by a soft fluid tumour of a rounded outline, and about two inches in diameter. A groove over the middle line of the neck divided the swellings. The skin overlying them, reddened and covered by a network of small vessels, seemed about to give way in the lower part of the swelling on the right side. On both sides of the neck enlarged and softened lymph-glands were felt above the swellings, and lying near the angles of the jaw. It was impossible to make out whether the masses moved with deglutition, but a faint expansion was noticed in them when the child cried. There was no stridor.

The swellings, which were obviously abscesses, were thought to be due to suppurating lymphatic glands. A few scattered scabs on the scalp, a conjunctivitis, and thrush were possible sources of infection.

The abscesses were opened and drained. Nothing unusual was noticed in the pus which escaped. Though a careful search was made with the finger in each cavity no communication could be made out between the two, there being a definite facial sheath attached to the structures in the middle line of the neck dividing them, nor did the swelling on the right side diminish after that on the left had been opened.

Though the abscess cavities closed the child continued to lose flesh. On October 20th the child was admitted to the hospital owing to its wasted condition. At this time it had a cutaneous abscess on the outer side of the left thigh, just above the knee. On October 27th the child died. No examination of the body was made.

I have to thank both Mr. C. S. Wallace, whose out-patient the girl was, for permission to publish an account of this case.

Pertussis with Prolonged Apnoea in a Child Four Weeks Old.

By G. V. BULL, M.B.



SHORT note of this case following the case described by Dr. Horder in the JOURNAL for August may prove of interest.

A male child, four weeks old, was admitted to Great Ormond Street in March, 1902, with the following history:

He had been ill for a week with cough and difficulty in breathing, and had "whooped." The (only) other child in the family had whooping-cough at the time.

The child had been breast-fed, and born at full term; he was well nourished. There was some cyanosis, but no cardiac murmur was heard.

At intervals he coughed feebly, became more deeply cyanosed, with some rigidity, and ceased to breathe. He revived on two or three occasions with inhalations of oxygen and artificial respiration, but only for a short while, and died a few hours after admission. He took small quantities of milk with difficulty, but no drugs were administered.

I have to thank Dr. Voelcker for permission to publish this note.

Notes on the History of the Hospital.

AT a time when changes loom in the not far distant future, when new land desolate, lies waiting the builder's hand, when the old order soon will be giving place to new, a few facts of history may be not without interest.

The day's work leaves the modern student little time to study the lives and doings of his predecessor's work, and Rahere is a name, a well-known name, but little more than a name beside.

Rahere, our founder, was, we learn from his biographer and fellow-monk, "a man sprung of low kynage," that, nevertheless, he was received among the nobility, and by his wit and good fellowship attained to considerable popularity, and is by some spoken of as King Henry I's minstrel or jester; still there is no good reason for believing that he ever held this office.

Enough is as good as a feast, however, and Rahere at length wearied of his courtier life and decided to journey to the court of Rome. In the words of his biographer, "coveting in so great a labour to do the worthy fruits of penance, where, at the shrines of the blessed apostles Peter and Paul, he, weeping his deeds, prayed to our Lord for remission of them."

During this visit he was seized with a grievous sickness, and, being like to die, vowed if he recovered that he "would make an hospital in recreation of poor men." On his homeward journey after his recovery, Rahere is reputed to have seen a vision, in which St. Bartholomew laid upon him the commands of Heaven to build in Smithfield a church, and, to this day the monument of his obedience remains in the Church of St. Bartholomew the Great. Rahere, on his return set to work to carry out the Divine commands, though the site for his building operations appears to have been by no means propitious, for Smithfield (or Smoothfield) was, at that time, no more than a marsh, and that part that was not submerged was used as a place of execution of criminals. Rahere's methods of obtaining funds were somewhat curious, for we are told "he was not ignorant of Satan's wiles, for he made and feigned himself unwise; for he was so coacted and outward pretended the cheer of an idiot, and began awhile to hide the secretness of his soul; and the more secretly he wrought the more wisely he did his work." Doubtless this conduct would not reward the latter-day worker as it did our founder, for the work progressed steadily, and in the year 1123 the Hospital and Priory of St. Bartholomew were founded. During the building, miracles are said to have occurred in Smithfield. For instance, a young man named Osborne, whose right hand stuck to his left shoulder, and whose head stuck to his hand, was cured at St. Bartholomew's. Again, a woman whose tongue could not

be contained in her mouth was indebted to Rahere's relics and holy water for a complete cure. When the Hospital was completed its staff consisted of a master, eight brethren, and four sisters. Rahere himself appointed the first master, one Alfun by name, "to whom was sad age and sadness of age with experience of long time." Alfun himself was the founder of St. Giles' Church, Cripplegate. The close of Rahere's life appears to have been somewhat distressful, as there was a considerable amount of ill-feeling concerning him among the people, which even went so far as a plot against his life. He appealed finally, however, to the king, begging that he "would open the bosom of his pity to them that were desolate, and restrain the barking folly of the unfaithful." And so the king granted a charter, which gave full liberty and great privileges to both Priory and Hospital. Rahere died after having been Prior twenty-two years and six months, and was buried in his own church, of which, however, only a part—the choir—now remains. It is difficult to realise the vast difference that exists between the Hospital then and now, but probably the lying-in and sick wards of a parish workhouse of the present day represent more nearly the condition of the Hospital for several centuries after its foundation.

The character of Rahere, with regard to which much has been said and written, does not concern us here, and though his detractors are many, the great and useful work which occupied the latter end of his life may well be left to speak for him.

Of the history of the Hospital for several generations subsequent to the death of its founder, comparatively little is known, neither have we accurate details of its plans for some centuries, by which time it had probably undergone many alterations. It is of interest to hear that one of these was carried out by the famous Richard Whittington, Lord Mayor of London, in the year 1423.

Smithfield itself was, at this time, a spot noted for its tournaments, which were held there with all military pageantry and splendour, and the name of Giltspur Street is doubtless derived from such associations. In his *Survey of London* Stow describes one such scene as follows:—"At the day appointed there issued forth from the Tower, about the third hour of the day, sixty coursers appaerled for the Jousts; and riding upon every one an Esquier; then came forth sixty ladyes of honour, mounted upon palfraies, riding on the one side, richly appaerled, and every lady led a knight with a chayne of gold. Those knights, being on the King's party, had their armour and apparrell garnished with white hartes, and crowns of gold above the harts neckes. So they came riding through the streets of London to Smithfield with a great number of trumpets and instruments of musicke before them."

Such is the procession along Smithfield, a vivid contrast to the place as we now know it, though doubtless the pastime of the jousts was by no means unproductive of work

in the Hospital, and to these remote times can be traced the well-known formula, "Cut head in the surgery, sir!"

After a lapse of several centuries there came the Reformation, and the Priory and Hospital did not escape the disasters that befell the monastic institutions throughout England. The Prior and his black-robed monks, the religious rites and ceremonies, were no more. The Hospital, however, was even then too necessary to the people for its loss to be borne without an effort, and what the Church could not do civic and private benevolence did, for in 1537 the Lord Mayor, Sir Thomas Gresham, together with his aldermen and citizens, begged the King to grant them the government of hospitals in London, among them St. Bartholomew's.

This petition appears to have met with no response for about six years, or at any rate that part which begged for the transfer of revenues to the City Corporation, the property being then held by the Crown. At length, however, in 1544, on June 23rd, letters patent were issued stating that as the Hospital was then vacant and destitute of Master, Fellows, and Brethren, and its possessions fallen to the Crown, the institution should be refounded, and should "consist of one Master and four Chaplain-Priests, to be called the Vice-Master, the Curate, the Hospitaler, and the Visitor of the Prisoners in Newgate."

To these officials was granted the site and buildings with their appurtenances to hold in pure and perpetual alms, the estates and their revenues, however, being retained by the Crown. The City Corporation were given no control by this act. As may be easily understood, this arrangement was most unsatisfactory, and two years later the King granted a charter to the City Corporation, giving them control of the Hospital and endowment to the extent of 500 marks per annum, on condition that the citizens should make themselves responsible for a like sum yearly.

Thus came about the second foundation, and to King Henry VIII belongs the proud title of our second founder. The troubles of the Hospital were by no means over, for criticisms on the subject of the work of the governing body were so numerous and free as to amount to slander, and were deemed worthy of a reply. This came in the form of a preface, with an account of the rules and regulations of the Hospital, so that all men might know how matters stood with the new foundation. This was published in the reign of Edward VI. and reprinted in 1580, and again in 1652. In this latter reprint, after describing the endowment, the writer tells of the dilapidated condition of the estates and the inefficiency of the appliances and furniture of the Hospital, referring to the large expenditure necessary; and he marvels that, notwithstanding the limited means available, "there have been healed of the pocks, fistules, and filthy blains and sores to the number of 800, and hence safe delivered, that other having need may enter in their room;" and congratulates himself upon the fact that eight score and

twelve others died there who might, by shuffling off this mortal coil at a less convenient spot, have become a nuisance in the City.

Then comes the list of governors and officers of the new foundation.

The governors were—

"The President, always the Senior Alderman.

Surveyors, four—two Aldermen and two Communes.

The Treasurer, a Commune.

Scrutiners, two, both Communes."

The officers were seven in number:

"The Hospitaler.

The Renter Clerk.

The Butler and Steward.

The Porter.

The Matron.

The Sisters, twelve.

The Byddles, eight.

"There are also in a kinde by themselves three Chirurgians in the wages of the Hospital, giving daily attendance upon the cares of the poor, and a minister named the Visitour of Newgate, according to his office and charge."

Not only was the bodily welfare of the patients the care of the surgeon, but he is enjoined to give religious advice as well, and at the end of the book is a form of thanksgiving to be said by the poor that were cured before quitting the Hospital. The wages, according to modern standards, do not sound princely. For instance, a matron received 1s. 6d. weekly, a sister 1s. 4d. The surgeons, however, probably considered themselves "passing rich on £20 a year." The total expenditure seems to have been about £690 per annum.

In the year 1557 the Hospital was associated with the other Royal hospitals—Christ's Hospital, Bridewell, and St. Thomas's Hospital—under a comptroller-general and surveyor-general, while for each one three aldermen, a treasurer, and eight other citizens were appointed as governing body. These separate bodies appear to have become more and more independent, even of the Lord Mayor and Corporation, for, after 1652, governors were introduced for pecuniary considerations independently of the Court of Aldermen, the elections being merely formally confirmed by the Lord Mayor. The natural result was friction between the Corporation and governing bodies, which were settled finally by Act of Parliament in 1782. By it the government of St. Bartholomew's was constituted more or less as it at present stands, being completely separated from the other Royal hospitals, the Corporation retaining a considerable share in the management, since the Lord Mayor and Court of Aldermen and twelve councillors were *ex officio* governors. The final separation from the Corporation occurred in 1866, when a lawsuit was entered upon to determine whether the governors should elect the Lord Mayor to the vacant office of president, or whether they

could elect whom they chose. The decision was for the governors, and forthwith His Royal Highness the Prince of Wales was elected President, an office which, on his accession to the throne, was accepted by the present Prince.

Such, in very brief outline, is the history of the Hospital; and though the present buildings were erected only as recently as 1760, yet the onward march of time and the progress of medical science compel further enlargements and improvements, improvements undreamt of by our predecessors, and such, that men shall say that, after the lapse of more than seven centuries, Bart.'s yet stands alone as the greatest hospital of the world.

A. D. W.

Lord Bacon—his Medical and Physiological Remains.

IN the older editions of the works of Lord Bacon, printed under the general heading of Natural History, we find his "medical and physiological remains." The substance of his "physiological remains" is chiefly "Inquisitions touching the Compounding of Metals." In this treatise very little attempt has been made at a systematic arrangement of facts, and upon the whole subject he has noted but little. There is still less to be found in the "medical remains," an erratic and unconnected assortment of notes, containing for the most part receipts for his own personal use, together with observations and general remarks upon a variety of subjects.

But even in this portion of his writings, although these are now generally neglected by all but the curious, there can be traced that vigour and breadth of intellect which had once, and not without reason, announced the whole domain of knowledge to be its sphere of action. In looking over these pages the reader is particularly struck by two things,—the extensiveness of his observation, and the remarkable activity of his mind. Indeed, few happier or more appropriate similes have ever been discovered than the one used by Macaulay when he likens the mind of Bacon to a model of the world. "His knowledge," says he, "differs from that of other men as a terrestrial globe differs from an atlas which contains a different country on every leaf."

In making a collection of observations I fear that I have been rather led by the irresistible but perfectly unintentional humour of many of them into selecting those which are more qualified to entertain than to instruct. The reader may occasionally find some difficulty in tracing, amid the antiquated style and the apparently quaint use of his words, the profound author of the *De Augmentis*. The following are some examples:

My object in this paper was to lay before the reader a few of the most characteristic of Bacon's observations upon medicine, physiology, and general natural history.

Experiment in comfort touching the influences of the moon.—The influences of the moon (most observed) are four: the drawing forth of heat, the inducing of putrefaction, the increase of moisture, the exciting of the motions of spirits. For the inducing of putrefaction it were good to try it with flesh or fish exposed to the moonbeams, and again exposed to the air when the moon shineth not for the like time, to see whether will corrupt sooner; and try it also with capon, or some other fowl, laid abroad, to see whether it will mortify or become tender sooner; try it also with dead flies or dead worms, having a little water cast upon them, to see whether it will putrefy sooner.

Experiment solitary touching titillation.—Tickling is most in the soles of the feet, and under the arm holes, and on the sides. We see a feather or a rush drawn along the lip or cheek doth tickle, whereas a thing more obtuse or a touch more hard doth not. And for suddenness, we see no man can tickle himself. Tickling also causeth laughter. The cause may be the emission of the spirits, and so of breath, by a flight from titillation; for upon tickling we see

there is ever a starting or shrinking away of the part to avoid it, and we see also that if you tickle the nostrils with a feather or straw it procureth sneezing, which is a sudden emission of the spirits that do likewise expel the moisture. And tickling is even painful, and not well endured.

Experiment solitary touching cuttle ink.—It is somewhat strange that the blood of all birds and beasts and fishes should be of a red colour, and only the blood of the cuttle should be as black as ink. A man would think that the cause should be the high concoction of that blood, for we see in ordinary puddings that the boiling turneth the blood to be black; and the cuttle is accounted a delicate meat, and is much in request.

Experiments in comfort touching drunkenness.—Drunken men are taken with a plain defect or destitution in voluntary motion. They reel, they tremble, they cannot stand, nor speak strongly. Drunken men imagine everything turneth round; they imagine also that things come upon them; they see not well things afar off; those things which they see near hand they see out of their place; and (sometimes) they see things double. The cause of the imagination that things turn round is that for the spirits themselves turn, being compressed by the vapour of the wine; and it is all one to the sight whether the visual spirits move, or the object moveth, or the medium moveth.

Experiment solitary touching caterpillars.—The caterpillar is one of the most general of worms, and breedeth of dew and leaves. They breed commonly when the east winds have much blown, the cause whereof is the dryness of the wind; for to all vivification upon putrefaction it is requisite the matter be not too moist; and therefore we see they have cobwebs about them, which is a sign of a flimsy dryness. The caterpillar, towards the end of the summer, waxeth volatile, and turneth to a butterfly, or perhaps some other fly. There is a caterpillar that hath a fur or down upon it, and seemeth to hath affinity with the silkworm.

Experiment solitary touching yawning.—It hath been noted by the Ancients that it is dangerous to pick one's ear whilst yawning. The cause is, for that in yawning the inner parchment of the ear is extended by drawing in of the spirit and breath; for in yawning and sighing both the spirit is first strongly drawn in and then strongly expelled.

Experiment solitary touching the venomous quality of man's flesh.—The French do report that at the siege of Naples there were certain wicked merchants that bartered up man's flesh, and sold it for tunny, and that upon that foul and high nourishment was the original of a disease. Which may well be; for that it is certain that the cannibals in the West Indies eat man's flesh, and the West Indies were full of the pox when they were first discovered. And sorceresses, as well amongst the heathen as amongst the Christians, have fed upon man's flesh to aid their imagination with high and foul vapours.

The ointment that witches use is reported to be made of the fat of children digged out of their graves, of the juices of smallage, wolfbane, and cinquefoil, mingled with the meal of fine wheat.

Preserving ointments.—Take of deer's suet one ounce, of myrrh 6 grains, of saffron 5 grains, of bay-salt 12 grains, of Canary wine of two years old, a spoonful and a half. Spread it on the inside of your shirt and let it dry, and then put it on.

Against the waste of the body by heat.—Take sweet pomegranates and strain them lightly, not pressing the kernel, into a glass; where put some little of the peel of a citron, and two or three cloves, and three grains of ambergris, and a pretty deal of fine sugar. It is to be drunk every morning whilst pomegranates last.

Methusalem water; against all asperity and tonefaction of inward parts and all adustion of the blood, and generally against the dryness of age.—Take of claret wine a pint, and quench gold in it four times. Of the wine and of the water of milk take of each three ounces, of the powder one scruple, and drink it in the morning. Stir up the powder when you drink, and walk upon it.

An extract by the Lord Bacon, for his own use, out of the book of the prolongation of life, together with some new advices in order to health.—(11) To use ale with a little emula campana, carduus, germander, sage, angelica seed, cresses of a middle age to beget a robust health.

(14) Never to keep the body in the same posture above half an hour at a time.

(15) Four precepts: to break off custom, to shake off spirits ill-disposed, to meditate on youth, to do nothing against a man's genius.

(20) Methusalem water, of pearls and shells, of crabs, and a little chalk.

(31) Agitation of beer by ropes or in wheelbarrows.

Certain sudden thoughts of the Lord Bacon's set down by him under the title of experiments for profit.—Muck of leaves; muck of river, earth, and chalk; muck of earth closed both for saltpetre and muck; mending of crops by steeping of seeds; brewing with hay, broom, wild thyme instead of hops; multiplying and dressing artichokes.

We would all gladly live to hear the indulgent laughter of our descendants, when the latest papers read before the Royal Society this year shall be pursued by them as curiosities; when the most ignorant student in their medical schools will possess funds of knowledge undreamt of by our ablest scientists; when the labour of a lifetime will be the work of a moment; when Science shall have passed far along on her triumphant progress, leaving our books, our methods, and our thought as far behind on the road of Truth as Bacon and his contemporaries lie behind ourselves.

A. R.

Amalgamated Clubs.

RUGBY FOOTBALL.

ST. BART'S 1ST XV v. R.I.E.C.

Played at Cooper's Hill on Wednesday, November 4th, on rather wet ground, when the College proved superior everywhere, and defeated us by the heavy margin of 7 goals 1 try (38 points) to *nil*. Bart's played up well at the start, and Owen nearly succeeded in scoring, but the superior condition of our opponents soon told, and, although the game was pluckily contested to the finish, they managed to pile up the above rather alarming total. Grandage played a sterling game, leading the forwards with admirable judgment; he is indeed an acquisition to the team. Team: E. S. Marshall (back); H. B. Owen, C. S. Lee, C. H. Cross, P. R. Parkinson (threes); W. G. Loughborough, W. H. Hamilton (halves); R. M. Ranking, W. Grandage, R. Jamison, A. J. Symes, G. H. H. Almond, H. A. Harris, F. McD. Courtney, S. Trevor Davies (forwards).

ST. BART'S 1ST XV v. LENNOX.

Played at Stamford Bridge on Saturday, November 14th. Result: lost by 2 goals 4 tries (22 points) to 1 try (3 points).

E. S. Marshall (back); B. A. Keats, H. B. Owen, C. H. Cross, C. S. Lee (threes); W. G. Loughborough, W. R. Collingridge (halves); W. B. Grandage, R. Jamison, A. J. Symes, H. A. Harris, F. Trewby, F. McD. Courtney, R. Wade, E. C. Hodson (forwards).

ST. BART'S 1ST XV v. UPPER CLAPTON.

Played at Winchmore Hill on Saturday, November 7th. A close and interesting game resulted in a win for Clapton by 2 goals (10 points) to *nil*. Forward we were more than a match for our opponents, but outside the scrum they showed superior combination, and won as stated.

ST. BART'S "A" v. UPPER CLAPTON "A."

This match was played at Winchmore Hill on Saturday, October 10th, and resulted in a win for the Hospital by 2 goals and 4 tries to 2 tries. N. M. Wilson scored twice, and E. S. Marshall, H. B. Hill, H. Spitz, and F. H. W. Brewer once each. There was not much chance of seeing who were our best men, as the game throughout was very easy, and at no time did our opponents make any show of a fight. However, some hard work was done, notably by Wilson, Marshall, Trewby, and Brewer. Team—

G. P. Jones (back); F. H. W. Brewer, N. M. Wilson, E. S. Marshall, H. Spitz (three-quarters); W. R. Collingridge, H. B. Hill (halves); F. Trewby, A. R. Snowdon, H. V. Wenham, A. G. Fuller, E. R. Jones, A. G. Horner, A. Hanau, A. Downes (forwards).

Referee, F. J. Craddock.

ST. BART'S "A" v. PARK HOUSE "A."

This match was played at Winchmore Hill on Saturday, October 17th, and resulted in a win for Park House by 6 points to 3. The match was very even throughout. Our wing three-quarters are good, but they did not have much chance, as our forwards played rather weakly and had very little command of the ball. Team:

G. P. Jones (back); N. M. Wilson, F. H. W. Brewer, P. Lang, B. A. Keats (three-quarters); W. R. Collingridge, W. H. Scott (halves); F. Trewby, G. R. Snowdon, H. V. Wenham, V. Favell, H. Cotton, F. Fuller, A. G. Horner, H. Spitz (forwards).

Referee, Mr. H. M. Huggins.

ST. BART'S "A" v. OLD ALLEYNIAN "A."

This match was played on the Dulwich College Ground, on Saturday, October 24th, in very wet weather. The ground was of the nature of a marsh, and our three-quarters did not adapt themselves to its stickiness as readily as did those of our opponents. We lost the toss, and in consequence had to play uphill and against the wind. Arnould kicked off for us, and following up hard the first scrum took place in the Old Alleynians twenty-five, but our forwards were unable to find their feet for some time, and, though considerably heavier, were unable to get the ball away. The Alleynians three-quarters then very nearly succeeded in scoring, some smart tackling on the part of our outsides, however, prevented this. But soon after this White, by feigning to pass, succeeded in getting past our back and getting a try, which Melville easily converted. Some loose play then took place in which Noke and Jamison were very prominent, after which Macdougall again scored for the Old Alleynians, Melville converting. Our forwards now began to assert themselves, and held their own till half-time. Soon after half-time Scott by means of a brilliant dash carried the ball into their twenty-five, and Harrison looked like scoring, but was brought down just on the line. Immediately after this Ryland and Noke almost succeeded in getting over. From then till the end of the game, however, we fell away; and, in spite of some good defensive work by Brewer, two more goals were registered against us in rapid succession, both being due to White. Thus we were beaten by 4 goals (20 points) to *nil*. Forward Noke, Ryland, and Arnould were prominent, while outside Brewer, Scott, and Harrison did good work. Teams:

G. P. Jones (back); E. Harrison, F. H. W. Brewer, W. H. Scott, W. B. Benjafield (three-quarters); W. R. Collingridge, H. Spitz (halves); L. A. C. Arnold, A. Ryland, F. H. Noke, A. R. Simonds, S. T. Davies, A. J. Fuller, J. von Brawn (forwards).

ST. BART'S "A" v. GUY'S "A."

Played at Honor Oak Park on Wednesday, November 11th. Resulted in a win for Guy's by 1 goal and 4 tries (17 points) to *nil*.

ST. BART'S v. LONDON IRISH.

Played at Winchmore Hill on Saturday, November 14th, resulting in a splendid struggle for supremacy, the Irish just winning by 3 tries to 1 goal. At half-time Bart's were leading by 1 goal to 1 try, and a magnificent dribble by Ryland and Wilson almost resulted in a further score, but the opposing back succeeded in touching down. The second half was a ding-dong struggle, but Irish scored a rather soft try from a forward rush, and soon after by a nice bout of passing got over again, winning as stated. Ryland, Arnold, Brewer, and Wilson were very prominent. G. W. Lloyd played as substitute for the Irish. Team:

G. P. Jones (back); B. N. Ash, F. H. W. Brewer (capt.), N. M. Wilson, C. H. Backus (threes); N. B. Benjafield, P. Lang (halves); L. A. Arnold, A. Ryland, H. V. Wenham, A. R. Snowdon, E. R. Jones, S. Trevor-Davies, C. Strickland, A. J. Fuller (forwards).

NOTES.

First have played 6 and lost 6.

Second have played 5 and lost 4, won 1.

No matches have been scratched up to date by Bart's.

Outsides badly needed. If any in Hospital, please come forward and assist.

H. T. M. Wilson, E. S. Marshall, H. B. Owen, W. B. Grandage, have played for the United Hospitals v. Cambridge.

ASSOCIATION FOOTBALL.

ST. BART'S v. HASTINGS AND ST. LEONARDS.

This annual match was played at Hastings on November 11th, and a very even game resulted in a draw. Score 2 all.

The Hospital kicked off with great rush, and for some while pressed and looked dangerously like scoring, but could never get a real shot in. Hastings cleared, and play for some while was of a give-and-take nature, till the home side worked its way forward, and for some while Bart's had a most anxious time; but thanks

chiefly to Rimington no score was registered. Even play now followed, and some rushes by the wings were indulged in. From one of these rushes and a centre from Butcher, Hogarth was able to register the first goal. Hastings very soon returned the compliment, thus making the score one all at half-time.

For the first part of the second half Hastings pressed, and were only with great difficulty prevented from scoring; but the Hospital clearing, Hogarth and Gordon took the ball right down the field between them, the latter scoring an excellent goal. This was certainly the prettiest piece in the whole match. It was not very long, however, before Hastings equalised, and then followed a short time in which each side pressed in turn, but no score resulted. Thus the game stood a draw.

For the Hospital Rimington at back was certainly the most useful player, whilst Miles was always in the right place, and Armitage saved some stiff shots. Team:

C. E. Armitage (goal); H. Rimington, H. Hardwick-Smith (backs); C. H. Fielding, A. Miles, J. R. Lloyd (halves); C. B. D. Butcher, J. C. Mead, A. H. Hogarth, T. J. Gordon, C. R. Evans (forwards).

AFTER THE MATCH the Hastings and St. Leonards Football Club and the Hospital team were entertained by the thirteen old Bart.'s men of Hastings and the neighbourhood to a tea and smoking concert at the Castle Hotel.

This annual gathering was started in 1896 by Mr. Gabb, and is always looked forward to by the Hospital A.F.C.

In the absence of Dr. Brodie, which was most regretted by all, Mr. Gabb occupied the chair. Thus we were once more treated to some of his characteristic speeches. He proposed the first toast, that of "Success to St. Bart.'s Hospital A.F.C." He said that this was a red-letter day to him, as he was heart and soul a Bart.'s man, and felt a pride in the ancient and noble Hospital, such as it was not easy to express in words. He briefly referred to the Hospital's appeal for funds for extension, and coupled this toast with the name of Mr. Hogarth, the captain.

Mr. Hogarth, in reply, thanked the old Bart.'s men most cordially for the reception which they had extended towards the team, and hoped that some day present students would be able to do as much for future Bart.'s men as the Hastings doctors were doing for them. He congratulated the Mayor on his re-election. Mr. Hogarth concluded by thanking the hosts very much for the kind way in which they had received the toast.

Dr. Gabb next proposed "Success to the Hastings and St. Leonards F.C." He first paid a fitting tribute to the late Marquis of Salisbury, their patron. He said that the result of the game would be given to the East Sussex Hospital, and amounted to £18 18s. The toast was coupled with the name of Mr. Shepherd, captain of the Hastings Club.

Mr. Shepherd, in reply, said that he was sorry to have been unable to play that day, but as long as a good game took place and a good gate was taken every one should be satisfied. He suggested that a return match should be played, and that the gate should go to Bart.'s extension fund.

Mr. C. Baunton proposed the health of "Our Hosts," and said they were all thorough good sportsmen. He expressed regret that Dr. Brodie, of Battle, was unable to

take the chair. Mr. Gabb, he said, they all knew, and nothing he could say could increase the high esteem in which they held him. He asked them all to drink to the health of "Our Hosts," coupled with the name of Mr. Gabb.

In reply, the Chairman thanked them for the enthusiasm with which they had received the toast. He said that he considered this to be the last Free Trade tea, as next year they would begin a run of Protection teas, with more to eat, drink, and smoke, and with better music. Above all, he said, Bart.'s doctors will have fewer demands on their pockets. The first Protection concert would take place with Dr. Scarlyn Wilson in the chair.

Throughout the evening a very excellent programme of music was given, which was loudly applauded.

HOCKEY CLUB.

ST. BART.'S v. HENDON.

This match was played at Hendon on Saturday, October 17th, and after a very even game ended in favour of Hendon by 5 goals to 4. For the Hospital Wroughton scored twice and Raikes twice, and Barton also played a brilliant game. Team was as follows:

F. Whitby (goal); L. L. Phillips and L. G. H. Furber (backs); H. B. Hill, B. H. Barton, E. Harrison (half-backs); R. L. Haines, A. C. Wroughton, C. T. Raikes, W. B. Griffin, H. Gray (forwards).

ST. BART.'S v. SEVENOAKS.

This match was played at Sevenoaks on Saturday, October 31st, and after a very good game resulted in a win for Sevenoaks by 7 goals to 4. The following scored the goals for the Hospital:—Griffin (2), Raikes (1), Gray (1). Team:

F. Whitby (goal); L. L. Phillips and L. G. H. Furber (backs); H. B. Hill, B. H. Barton, and C. E. Adam (half-backs); R. L. Haines, J. Gaskell, C. T. Raikes, W. B. Griffin, and H. Gray (forwards).

ST. BART.'S v. BRONDESBURY.

Played at Brondesbury on Saturday, November 7th, the ground being in a shocking condition. The game was very even throughout, the score at half-time being 1 goal all; in the second half, however, Brondesbury put on two goals to one more from the Hospital, thus leaving the former winners by 3 goals to 2. Griffin and Gray scored the goals for the Hospital. Team:

M. F. Grant (goal); L. L. Phillips and L. G. H. Furber (backs); H. B. Hill, W. R. Collingridge, and C. E. Adam (half-backs); R. L. Haines, J. Gaskell, W. B. Griffin, A. C. Wroughton, and H. Gray (forwards).

ST. BART.'S v. ERITH.

This match was decided at Erith on Saturday, November 14th, and resulted in a drawn game of 2 goals all. The goals for the Hospital were scored by Gaskell and Lynn. Team:

F. Whitby (goal); L. L. Phillips and W. E. L. Fowler (backs); H. J. D. Birkett, E. Harrison, and C. E. Adam (half-backs); R. Lynn, J. Gaskell, A. C. Wroughton, G. H. Adam, and H. Gray (forwards).

ST. BART.'S v. R.M.A., WOOLWICH.

This game was played at Woolwich on Wednesday, November 18th, resulting in a win for the Academy after a very even game by 2 goals to 1, Wroughton scoring the only goal for the Hospital. Team:

F. Whitby (goal); L. L. Phillips and L. G. H. Furber (backs); G. F. Page, R. C. P. Berryman, and C. E. Adam (half-backs); R. L. Haines, J. Gaskell, A. C. Wroughton, R. M. Im Thurn, and H. Gray (forwards).

ST. BART.'S v. STAINES.

Played at Staines on Saturday, November 21st, the home team winning by 7 goals to nil. Team:

F. Whitby (goal); L. L. Phillips and L. G. H. Furber (backs); H. B. Hill, B. H. Barton, and R. C. P. Berryman (half-backs); R. L. Haines, J. Gaskell, W. B. Griffin, G. H. Adam, and H. Gray (forwards).

Musical Society.

THE orchestral section of the above Society meets every Tuesday afternoon at 4.15 in the Inquest Room, for the purpose of practising for the Christmas entertainment, which will probably take place on three consecutive days in the early part of January next. It is earnestly hoped that all *freshmen* and others who have some knowledge of orchestral instruments should join the Society, and help to keep up the high standard attained in former years at these annual entertainments.

Any men desirous of further information should communicate by letter with Mr. H. R. Prentice, Cloak Room, St. Bartholomew's Hospital.

Abernethian Society.

OCTOBER 8th.—The sessional meeting was held in the Medical Theatre. Mr. Boyle, President, made appropriate reference to the loss sustained by the Hospital in the death of Mr. Walsham.

Dr. Clave Shaw read his paper on "The Psychology of Social Epochs," which was received with great enthusiasm by the large number of members present. The paper was published in the November number of the *Hospital Journal*.

October 15th.—The first ordinary meeting was held in the Society's room. Mr. Young read a very interesting paper on "Prostatic Obstruction." A number of members took part in the discussion which followed.

October 22nd.—Clinical evening. Mr. Denham White showed a man with some obscure wasting of the leg. Mr. Elmslie brought down from the wards two interesting cases: one, a boy of sixteen with coxa vara; and the other, a girl of eight years with congenital dislocation of both hips. Mr. Jeudwine showed a case of abdominal tumour, and Mr. Farncombe had a very interesting double placenta with a foetus papyraceus in one half.

October 29th.—Mr. McAdam Eccles read a paper at this meeting on the "Incidence of Appendicitis." It was accompanied with an excellent series of lantern slides. The paper is published in the current number of the *JOURNAL*.

November 5th.—The meeting was held in the Anatomical Theatre, Mr. Young in the chair. Dr. Jossé Johnson read his paper on "Dr. Otto Schmidt's Specific Treatment of Cancer," before a large audience of members and visitors. The paper dealt with the existence of a cancer parasite, and the results obtained from the use of Dr. Otto Schmidt's serum.

In the discussion which followed Mr. Willett reminded those present that fifty years previously Sir James Paget had demonstrated the parasite of trichinosis before the Society. He was struck, he said, by the statement that the serum only reacted upon cancerous patients, which he thought was the most notable feature of the subject, thus constituting a test.

Dr. Lovell Drage spoke at length in confidence of the good effects to be obtained by certain organic compounds related to cinnamic acid in cancer.

Dr. Andrewes would sound a note of warning, inasmuch as the cancer parasite had been so often discussed before. He asked what was the organism, how it was cultivated, and what was the nature of the inoculation.

The paper has been published in the *Lancet* of November 14th.

November 12th.—Dr. Edwardes Stack read a paper on "Intubation for Diphtheria." He had performed the operation in 208, and was of opinion that intubation was much to be preferred to tracheotomy. Mr. Boyle, from the chair, opened the discussion, in which the following gentlemen joined:—Dr. Conrad Brown, and Messrs. Mackay, Nixon, Conolly, and Brown.

The general opinion was that intubation was better than tracheotomy, but needed more practice for its successful carrying out.

The Cambridge Graduates of St. Bartholomew's Hospital Club.

THE annual dinner of the above Club was held at Frascati's Restaurant on November 9th. It is satisfactory to be able to state that the attendance was the largest on record, eighty-two members being present. This fact reflects the greatest credit on the Secretaries, Dr. Fletcher and Dr. Horton Smith, who are responsible for the organisation of the Club and for the details of the admirable dinner provided.

The chair was taken by Dr. W. H. Rivers, of St. John's College, who, in proposing the toast of "The Club," referred to the close union that had always existed between St. Bartholomew's and Cambridge University, a union that had been further strengthened by the appointment of Mr. Howard Marsh to the chair of surgery. He then told some interesting experiences he had had whilst investigating the habits and traditions of certain tribes in India, showing that this branch of scientific research was not entirely free from danger to life and limb.

Dr. Norman Moore was in his very best form in proposing the toast of "The Guests," and we can give no higher praise to an after-dinner speech. He referred to the advantages he had had in living for so many years in the Warden's house, on land given to the Hospital by King Stephen, an advantage shared by two others present, Dr. Calvert and Mr. Harmer. He made sympathetic reference to a deer park that had existed to the north of Holborn at the same date. Amongst the guests were Dr. Garrod, Colonel James, Dr. Calvert, and Dr. Giglio of Florence. In each case his encyclopædic knowledge and lively imagination enabled him to combine instruction and entertainment in proposing their healths. Especially interesting was his reference to the great debt that medical science owed to the intellectual giants of mediæval Italy.

Colonel James and Dr. Giglio replied in excellent speeches. Then Dr. Tooth proposed the health of the Chairman, and made a sympathetic reference to the interest that his post-mortem examination would afford. This was replied to, and after the customary thanks to the Secretaries the proceedings broke up.

Music was provided by Messrs. Holroyd, Forster, and Donaldson. We especially enjoyed Mr. Holroyd's rendering of the tenor song from "The Gondoliers." All are to be congratulated on a most successful meeting.

Freshmen, Session 1903-4.

LONDON UNIVERSITY.

Backus, C. H. Chatham House, Ramsgate.
Bomford, T. L. Dean Close, Cheltenham.
Candler, A. L. Lancing College.

Chipp, E. E. Highgate School.
 Courtney, F. McD. Dulwich College.
 Craddock, F. J. Bath College.
 Dale, W. C. Barnet Grammar School.
 Davies, S. T.
 Eckel, C. F. Queen's Royal College, Trinidad.
 Fry, A. P. St. John's School, Leatherhead.
 Goodlow, H.
 Hacker, H. J. King's College.
 Hammond, J. M. Bristol University.
 Holgate, M. J. University College, Nottingham.
 Holthusen, A. Bancroft School, Woodford Wells.
 James, W. A. Cardiff Medical School.
 Kalapesi, R. M., Grant Medical College and Jamsetji Hospital, Bombay.
 Kebbell, C. F. V. Rolandsek School, Ealing.
 Kernahan, J. A. St. Mary's College, Trinidad.
 King, H. H. Tillington Mart College.
 Lang, P. Archbishop Holgate's, York.
 Lukis, T. S. Tonbridge School.
 Lynn, G. Rigby. Tonbridge School.
 Mason, T. H. Charterhouse School.
 Moreton, A. L. Merchant Taylors'.
 Oliphant, F. M. South-Eastern Coll., Ramsgate. (Not yet matriculated.)
 Paterson, J. J. Cardiff Medical School.
 Pearce, R. King's School, Canterbury.
 Price, R. B. Caterham School, Surrey.
 Ramsay, J. Owens College, Manchester.
 Rimington, H. Archbishop Holgate's, York.
 Ross, W. D.
 Ryland, A.
 Searle, F. C. Malvern College.
 Smith, H. G. Merchant Taylors'.
 Snowden, E. N. Hutchin's School, Hobart. University of Tasmania.
 Snowdon, A. R. Kelly College, Tavistock.
 de Verteuil, E. J.
 Viner, G. Merchant Taylors'.
 Weakley, A. L. Wellingborough Grammar School.
 Williams, R. T. Wrexham County School.
 Wolferstan, R.
 Yates, A. L. Felsted School.

CAMBRIDGE UNIVERSITY.

Barris, J. D. West Kent Grammar School. Caius.
 Bean, J. W. Clare.
 Cane, L. B. Uppingham School. King's.
 Fuller, A. J. S.
 Gaskell, W. H. Marlborough College. Caius.
 Gordon, F. J. Weymouth College. Christ's. M.R.C.S., L.R.C.P.
 Given up Cambridge degree.
 Gourlay, W. B. Edinburgh Academy. Trinity College.
 Grandage, W. B. Sedbergh School. Clare.
 Griffin, F. W. W. Weymouth Coll. King's. M.B., B.C. 1st F.R.C.S.
 Haigh, B. Lancing College. Caius.
 Harris, H. A. Bedford School. Emmanuel.
 Hill, R. A. P. Harrow School. Caius.
 Horner, N. G. Tonbridge School. Caius. M.B., B.C.(Cantab.).
 Lang, B. T. Abbotsholme, Derbyshire. Trinity College.
 Nash-Wortham, F. L. Eastbourne Coll. Pembroke. M.R.C.S., L.R.C.P.
 Owen, A. H. Llandovery School. Caius.
 Postlethwaite, J. H. Fauconburge, Beccles. Emmanuel. M.B., B.C.
 Roberts, J. H. Marlborough College and Liverpool College. Emmanuel. M.B., B.C.
 Simpson, G. C. E. Mill Hill School. St. John's.
 Smith, A. K. Toulmin. Dulwich College. Emmanuel.
 Smith, J. M. Grey College, Bloemfontein, S.A. Victoria College, Cape University. Christ's.
 Strickland, C. St. Andrew's Coll., Grahamstown, Oundle Sch. Caius.
 Teichmann, O. Aldenham School. Caius.
 Trapnell, F. C. Leys School. King's. M.B., B.C. 1st F.R.C.S.
 Tylor, C. Marlborough College. Caius.
 Wade, R. Sedbergh School. Christ's.
 Whitaker, C. Dulwich College. Emmanuel.
 Williams, W. H. Cheltenham College. Caius. M.B., B.C.

OXFORD UNIVERSITY.

Almond, G. H. H. Hertford.
 Burra, L. T. Winchester College. University.
 Priestley, J. G. Eton College. Christ Church.
 Wells, W. W. Hadley College. Merton. M.B.

CONJOINT BOARD.

Allnutt, E. B. Stevenage School, Herts.
 Beckton, J. J. H. Private.
 Bickers, R. T. Yorkshire College, Leeds.
 von Braun, R. Private.
 Clifford, R. C.
 Davies, I. J. Wards.
 Deck, H. L. Sydney University.
 Douglas, C. S. Owens College, Manchester.
 Downes, A. King William's College.
 Gray, G. C. Felsted School.
 Hall, P. Private.
 Hodge, W. H. S. R.N. Acad., Bognor.
 Keats, B. A. Royal Naval Sch., Eltham, and King's Coll., London.
 Laidlaw, F. F. Not up. Cambridge.
 Langford, S. C. King's College, Taunton.
 Lloyd, J. D. S. Wards.
 Maclean, G. K. Tonbridge School.
 Miller, H. G.
 Mozumder, S. Doveton College, Calcutta.
 Reckless, P. A.
 Roper, R. N. Trinity College, Dublin.
 Scott, A. B. Epsom College.
 Spitz, H. University College, London.
 Tha-Htoon-Oo. Doveton College, Calcutta.
 Viner, G.
 Wadia, M. D. Grant Medical College, Bombay.
 Willes, C. F. Private.
 With, P. A. Albemarle College, Beckenham.

Correspondence.

To the Editor of the St. Bartholomew's Hospital Journal.

SIR,—I have been asked, on behalf of the Bishop of Zanzibar (the Right Rev. J. E. Hine, M.D.), to make known the great need that exists in his diocese for the services of a fully qualified medical practitioner.

In a letter received within the last few weeks the Bishop writes:

"After completing a visit of some duration in the Magila Archdeaconry I see more clearly than before what an opening there is here for a doctor, and what a useful work he could do in this part of the country. Wherever I go, whether to Msalabani, or Kologwe, or into the interior, I have people coming to me seeking medical or surgical treatment—genuine cases, often of considerable scientific interest.

"At Kologwe in this last week I had to do quite a succession of operations, and there were other cases needing longer and careful attention which I could not, owing to lack of time, undertake with any hope of benefit to them. A resident surgeon (resident in the district, I

mean) would have now a considerably larger area to travel over than was the case some years ago, when Dr. Ley was alive. The people all prefer to come for treatment to the Mission or to the Mission Dispensaries, rather than to go to the German Government Hospital at Tanga, excellent though it no doubt is. With our present staff of nurses there ought to be no difficulty in a competent man undertaking cases of the gravest nature. In the Likoma Diocese I had the valuable help of Dr. Howard, and his work, I hear, is always increasing, as the people on the lake shores get to understand and to value the skilled treatment they receive at his hands. We want another Dr. Howard here at Magila; he would find plenty to do, and possibly a good deal to investigate of scientific interest, as well as very practically helping the work of the Mission. Such a doctor must, of course, be one in thorough sympathy with the Church work that is carried on in the country, and he should have to some degree the missionary vocation himself, though he would not be required to do anything else except to pursue his own particular calling.

"There is also the health of the European staff to be considered; that, too, requires a resident doctor, so that in severe cases it may not again be necessary to cable to Zanzibar for assistance, or to send down to Tanga on the possible chance of being able to call in the German doctor who is sometimes to be found there.

"If those who are in touch with hospitals or with young surgeons recently qualified could bring this want before them, it is not unlikely that some one might be found who would be willing to offer himself for the work."

I should be most glad to give further and more detailed information to any who may desire it.

OSWALD A. BROWNE, M.D.,

Member of the Medical Board of the Universities' Mission to Central Africa.

Reply care of SECRETARY,
Universities' Mission to Central Africa,
9, Dartmouth Street,
Westminster, S.W.

October 26th, 1903.

To the Editor of the 'St. Bartholomew's Hospital Journal.'

UNITED HOSPITALS HARE AND HOUNDS.

DEAR SIR,—May I call attention through the medium of your Journal to the existence of the above Club, which, although instituted some sixteen years ago, has been poorly supported during the last two or three years? Owing to the loss of most of last year's regular men we are rather short of active members this year, and it is hoped that any cross-country men that there may be at your Hospital will turn out and support the Club. Club runs take place at 3.30 on Saturdays with the Blackheath Harriers, from their headquarters at the "Green Man," Blackheath (station: Lewisham Junction or Blackheath Hill, S. E. & C. Ry.). In addition to these ordinary runs several matches and a handicap have been arranged for this season.

I shall be glad to give men intending to run out any information they may require.

Thanking you in anticipation for inserting this notice, I am, yours faithfully,

T. E. A. CARR (*Hon. Sec.*).

GUY'S HOSPITAL, S.E.;
Oct. 30th, 1903.

To the Editor of the St. Bartholomew's Hospital Journal.

DEAR SIR,—The accompanying engraving represents an apparatus which I have been using for some time for the administration of Somnoform, and consists of a celluloid facepiece and a rubber pad connected to a rubber bag.

A piece of lint, easily changeable, of about 4" x 8" can be adapted to the interior of the facepiece by means of a special spring.

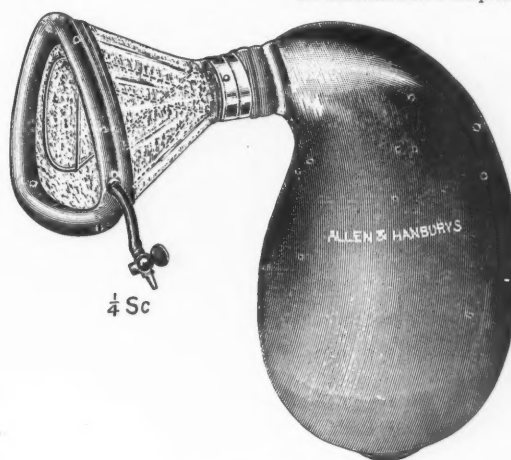
I have found that with this apparatus a dose of from 2.5 c.c. to 3 c.c. of Somnoform is enough to (within from thirty-five to fifty seconds), produce an anaesthesia sufficient either to act as a brief general anaesthetic or as a precursor to ether.

The advantages I claim for my apparatus are—

1. Simplicity of construction, there being no valves or anything else liable to get out of order.
2. That the lint does not require to be of any special shape, a piece 4" x 8" being all that is necessary.
3. That the aperture leading to the bag has been made especially large to prevent any difficulty in respiration.
4. That the cost of the apparatus fitted with one facepiece is only £1 1s., and is therefore relatively inexpensive.

The apparatus has been made to my design by Messrs. Allen and Hanburys, from whom it can be obtained.

H. EDMUND G. BOYLE, M.R.C.S., L.R.C.P.,
*Junior Resident Anaesthetist,
St. Bartholomew's Hospital.*

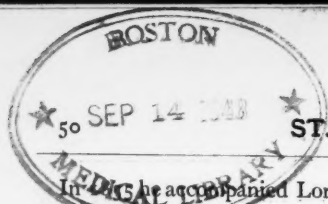


Obituary.

MR. JOHN BRENDON CURGENVEN, M.R.C.S.,
L.S.A.

WE regret to announce the death of Mr. John Brendon Curgenvén, which took place at Hildenborough on the 15th inst., quite suddenly from cardiac failure.

He was born at Tretawn in Cornwall in 1831, and entered St. Bartholomew's Hospital in 1847, qualifying in 1852, and in the following year was appointed House Surgeon to the Royal Free Hospital.



In 1862 he accompanied Lord Ward as medical attendant to the Crimea, and was present at the attack on the Redan, (June 14th) when he acted as volunteer surgeon. He was also present at the taking of Kerch.

He took charge of Miss Nightingale when convalescent from fever, conveying her to Scutari.

Mr. Curgenven was Honorary Secretary to the Harveian Society from 1862 to 1872, and Vice-President 1872-3. In 1859, as a member of the Provisional Committee, he assisted in founding the New Sydenham Society. He also served on the Parliamentary Bills Committee dealing with the first Habitual Drunkards Bill, and on other committees concerned with Infant Mortality and the Registration of Midwives.

He was a member of the Council of the Obstetrical Society 1872-3, and was co-honorary secretary with the late Mr. Berkeley Hill of an association for the extension of the Contagious Diseases Acts, and at the time of their repeal by Mr. Gladstone was examined by the Select Committee of the House of Commons, and acted as Assessor, in favour of the Acts, before the Royal Commission. In addition to all this public medical work he practised in Bayswater from 1856 to 1890, and was Churchwarden at Christ Church, Lancaster Gate, for twenty-six years.

In 1900 Mr. Curgenven retired from practice and spent the last few years of his life at Hildenborough, Kent, but he never lost interest in medical work, and it was while returning from a meeting of the local branch of the British Medical Association that he died.

His loss will be deeply felt, not only by his family but by a large circle of his former patients and friends.

Examinations.

CONJOINT BOARD.

The following gentlemen have passed the recent Primary Fellowship (November):

P. L. Giuseppi, J. E. R. McDonagh, R. F. Moore, A. H. Pinder, S. S. Rendall.

EDINBURGH.

A. A. Bradburne, L.R.C.P., L.R.C.S.Ed., has taken the F.R.C.S. Ed.

DURHAM UNIVERSITY.

M.B. Degree.—A. H. Bateman.

B.S. Degree.—A. H. Bateman.

Appointments.

CHEESE, J. W., M.R.C.S., L.R.C.P., appointed Resident Medical Officer at the Newcastle Union.

DAVIS, C. NOEL, M.R.C.S., L.R.C.P., appointed House Surgeon to the North Lonsdale Hospital, Barrow-in-Furness.

GIBLIN, Capt. W. W., Inst. A.M.C., to be Major and Principal Medical Officer, Tasmania.

GREGORY, C. H., M.B., B.C.(Cant.), appointed Surgeon to ss. "Indralem."

HARKE, S. L., B.A.(Cant.), M.R.C.S., L.R.C.P., appointed House Physician to the North-Eastern Hospital for Children, Hackney Road.

HIGGINS, A. G., M.R.C.S., L.R.C.P., appointed Surgeon to ss. "Kintuch" to Japan.

KIDNER, H. R., B.Sc.(Lond.), M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to the Wyke House Asylum, Isleworth.

STONE, G. W., M.R.C.S., L.R.C.P., appointed Surgeon to ss. "Warwickshire."

THOMAS, R. J. P., M.R.C.S., L.R.C.P., appointed Casualty Officer to the London Temperance Hospital.

New Addresses.

BRIGGS, J. A. O., Noel Street, Gregory Boulevard, Nottingham.

CARPENTER, E. G., Kasr-el-Aini Hospital, Cairo.

CROFT-HILL, A., 169, Cromwell Road, S.W. (Telephone: 869 Western).

DAVIES, HOWELL, 89, Visagie Street, Pretoria, South Africa.

EDE, A. GORDON, The White Hall, Abridge, Essex.

FORBES, J. G., 10, Bentinck Street, W.

FOX, E. H. B., Pear Tree Green, Itchen, Southampton.

HENSLEY, P. J., Hotel d'Italie, Mentone, France.

HOLMES, H., 13, Princes Avenue, Liverpool.

MARCH, J. O., Emsworth, Hants.

MARSH, HOWARD, 14, Hertford Street, Mayfair, W.

MORTIMER, J. W. D., 4, Burton Court, Lower Sloane Street, S.W.

MURRAY, F. E., Ambleside, Kloof Road, Cape Town, Cape Colony.

NORBURY, W., 32, Gordon Square, W.C.

OAKLEY, A. R. H., Northlands, Hollycroft Avenue, Hampstead.

O'FINIGAN, D. C., 5, Windsor Road, Ealing, W.

PANK, H. W., New Barnet, Herts.

PARKER, H. F., Burnside, York Road, Guildford.

PARSONS, H. C., 119, Dartmouth Road, Willesden Green, N.W.

PENNEFATHER, C. M., Deanhurst, Harrow.

PICTON, L. J., Holmes Chapel, near Crewe.

SCOTT, S. R., 44, Welbeck Street, W.

SLATER, W., Woodland Cottage, Wanstead, N.E.

SLOANE, H. H., 203, High Road, Willesden Green, N.W.

STEPHENS, H. D., Laingburg, Cape Colony.

THOMAS, A. E. H., Eastern Fever Hospital, Homerton.

WATERHOUSE, J. H., 19, Avenue Victoria, Scarborough.

WIGHTMAN, C. F., Royston, Herts.

WILLIS, CYRIL HAMER, Branksome Park, Bournemouth.

WOOD HILL, H. G., Beccles, Suffolk.

WOOD, P., Crawley, Sussex.

YELD, R. A., 29, Platt's Lane, Hampstead, N.W.

Births.

CALVERLEY.—On the 17th of November, at 10, Earl's Avenue, Folkestone, the wife of Joseph E. G. Calverley, C.M.G., M.D., of a son.

GIBLIN.—On June 17th, at Hobart, Tasmania, the wife of Wilfrid W. Giblin, M.R.C.S., L.R.C.P., of a son.

HARRIS.—On October 28th, at St. John's, Birchington, the wife of H. C. Harris, M.D., B.S., of a son.

HOOLE.—On October 25th, at the Croft, Yardley, the wife of John Hoole, M.R.C.S., L.S.A., of a son.

PEARSON.—Durban, South Africa, to Dr. M. G. Pearson and Mrs. Pearson, a stillborn son, on the 6th Nov.